The City of Winnipeg Tender No. 615-2022 Appendix
Page 1 of 1

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Appendix G: TRANSPORT CANADA APPROVAL



Navigation Protection Program (NPP) 344 Edmonton Street Winnipeg, MB R3C 0P6

December 7, 2022

City of Winnipeg 1155 Pacific Ave Unit 106 Winnipeg, MB R3E 3P1

Attention: Damir Muhurdarevic

RE: Approval under the Canadian Navigable Waters Act (CNWA), for the alteration

and/or placement of the following works below located on the Red River, at approximately 49° 51' 19.7 N, 97° 7' 36.7 W, St. Vital Bridge, in the City of

Our file: 1988-600001

Registry number: 6280

Winnipeg, in the Province of Manitoba.

Approved work(s):

- Bridge
- Erosion-protection work

Please find enclosed an approval for the above-noted work issued by the Minister of Transport under subsection 7(6) of the CNWA. This approval replaces any previous approvals that have been issued in relation to this work (if any) and will be the sole approval for this work until such time as a new approval is issued for any future changes.

In order to issue this approval, the Minister has considered each of the factors listed in subsection 7(7) of the Act, additional information provided by you (if applicable) and any adverse effects that the decision to approve the work may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*.

Please note that the CNWA, amongst other obligations, requires the owner to immediately notify the Minister if the work causes or is likely to cause serious and imminent danger to navigation, to take reasonable measures to mitigate potential dangers and to remedy any adverse effects that result from that danger to navigation.

This approval relates only to the interference of your work with navigation under the CNWA and does not grant any rights related to the ownership of the bed of the navigable water.

Please note that it is the owner's responsibility to comply with any other applicable laws and regulations.

Please contact our office in the Prairie and Northern Region for any questions, by phone at 1-844-425-7787 or by e-mail at NPPPNR-PPNRPN@tc.gc.ca.

Respectfully,

Jemma Harrison NPP Officer

Programs Group Transport Canada

Prairie and Northern Region

Attachment(s): 1988-600001 Approval Documents



Navigation Protection Program (NPP) 344 Edmonton Street Winnipeg, MB R3C 0P6

APPROVAL

OWNER: City of Winnipeg

1155 Pacific Ave Unit 106

Winnipeg, MB R3E 3P1

SITE LOCATION: Located on the Red River, at approximately 49° 51' 19.7 N, 97° 7'

36.7 W, St. Vital Bridge, in the City of Winnipeg, in the Province of

Our file: 1988-600001

Registry number: 6280

Manitoba.

WORK(S):

- Bridge
- Erosion-protection work

As per the application (detailed above) to the Minister of Transport, submitted pursuant to the *Canadian Navigable Waters Act*, for an approval of the work per the attached plan(s): Cover Sheet – Location Plan, Scope Of Work, Existing General Arrangement, Proposed General Arrangement, Navigation Light Detail and Annex A, the Minister hereby approves the work pursuant to subsection 7(6) for the alteration and/or placement of the above mentioned work, in accordance with the following terms and conditions:

- 1. All vessels navigating the watercourse must be allowed access through or around the work site at all times during construction and must be assisted as necessary.
- 2. Signs stating "Construction Ahead" must:
 - a. Be placed and maintained 200 metres upstream and 200 metres downstream of the work during all periods of open water.
 - b. Be placed on both banks of the river.
 - c. Be legible from a minimum distance of 100 metres.
 - d. Display black lettering on a yellow or orange background.
- Temporary works placed within the ordinary high watermark during all periods of open water must be marked:
 - With cautionary buoy(s) (yellow) at each end (corner) and at any other location alongside the temporary work(s) so that the buoys are spaced not more than 10 metres apart during all periods of in stream activity; and
 - b. With yellow flashing lights at each end (corner) and at any other location so that the lights are spaced not more than 10 metres apart from dusk till dawn and during all periods of restricted visibility.
- 4. A minimum navigational clearance of 5 metres vertical by 35 metres horizontal must be maintained during all periods of open water.
- 5. An air draft gauge constructed as shown in sample drawing "Annex A" must:
 - a. be placed on Pier 5 during all periods of open water while the temporary work platform is in place; and
 - b. be aligned to descend from the bottom soffit of the temporary work platform.
- 6. Retro-reflective markings providing a reflective surface of not less than 10cm x 30cm each, must be installed at 1 metre intervals around the bottom soffit of the temporary work platform.
- 7. Temporary work(s) must be removed immediately upon completion of the permanent work.
- Navigation Lights indicated on Drawing No. 4 (Proposed General Arrangement) must be white in colour.



9. The Minister or his representatives must be allowed unimpeded access to any site related to the project for inspection and/or monitoring purposes.

SIGNED ON December 7, 2022 at the NPP regional office of the Prairie and Northern Region

Jemma Harrison NPP Officer Programs Group Transport Canada Prairie and Northern Region For the Minister of Transport



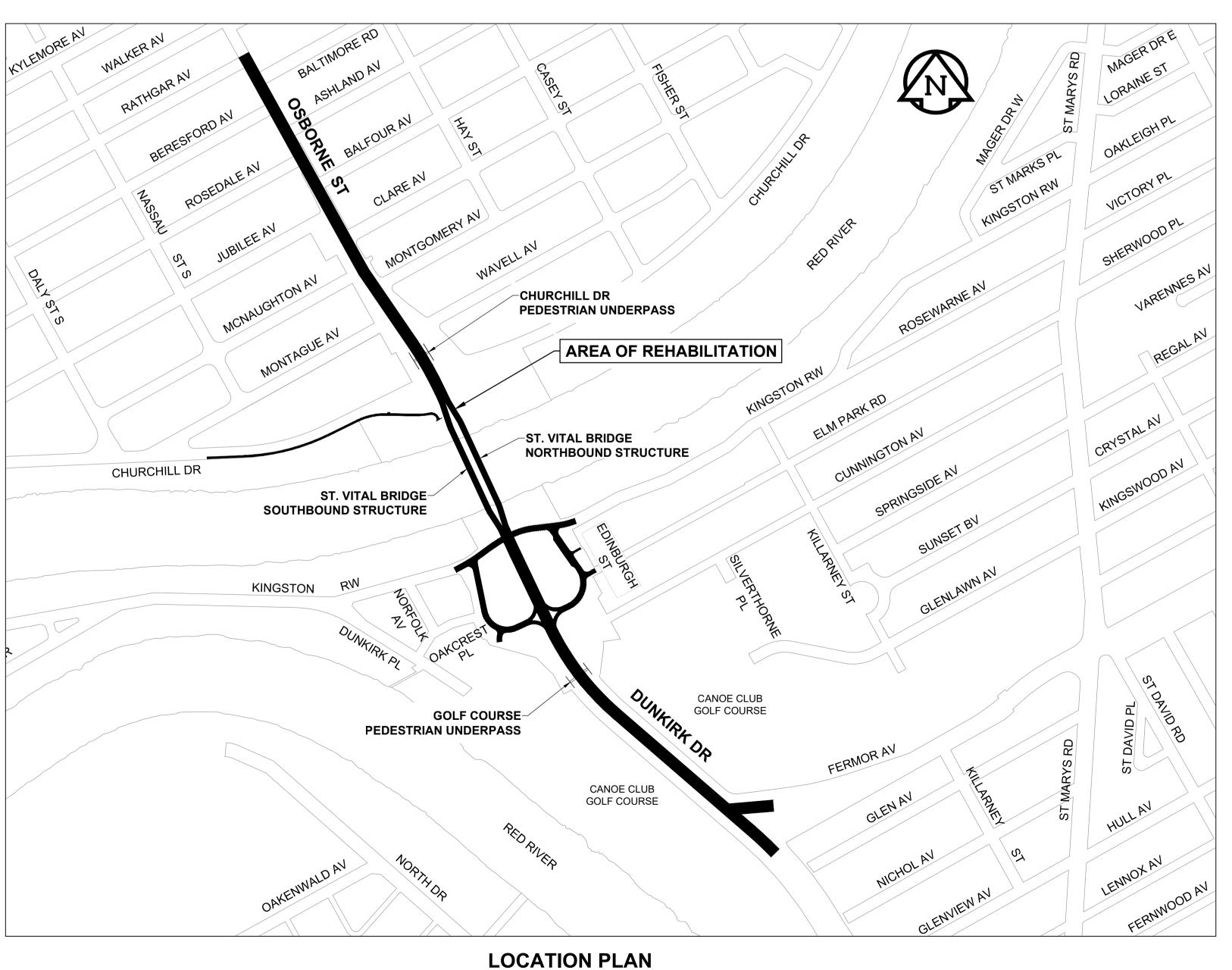
THE CITY OF WINNIPEG

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION



ST. VITAL TWIN BRIDGE OVER THE RED RIVER REHABILITATION AND RELATED WORKS

TENDER No. 615-2022



DRAWING LIST
SHEET No. DESCRIPTION

BRIDGE REHABILITATIO

COVER SHEET - LOCATION PLAN SCOPE OF WORK EXISTING GENERAL ARRANGEMENT PROPOSED GENERAL ARRANGEMEN

Reviewed / Examiné

Date: December 7, 2022

By/par:

JEMMA HARRISON
Navigation Protection Program /
Programme de Protection de la Navigation

SCALE: 1:5000

RELEASED FOR CONSTRUCTION BY:

STREETS PROJECT ENGINEER

DATE

MORRISON HERSHFIELD

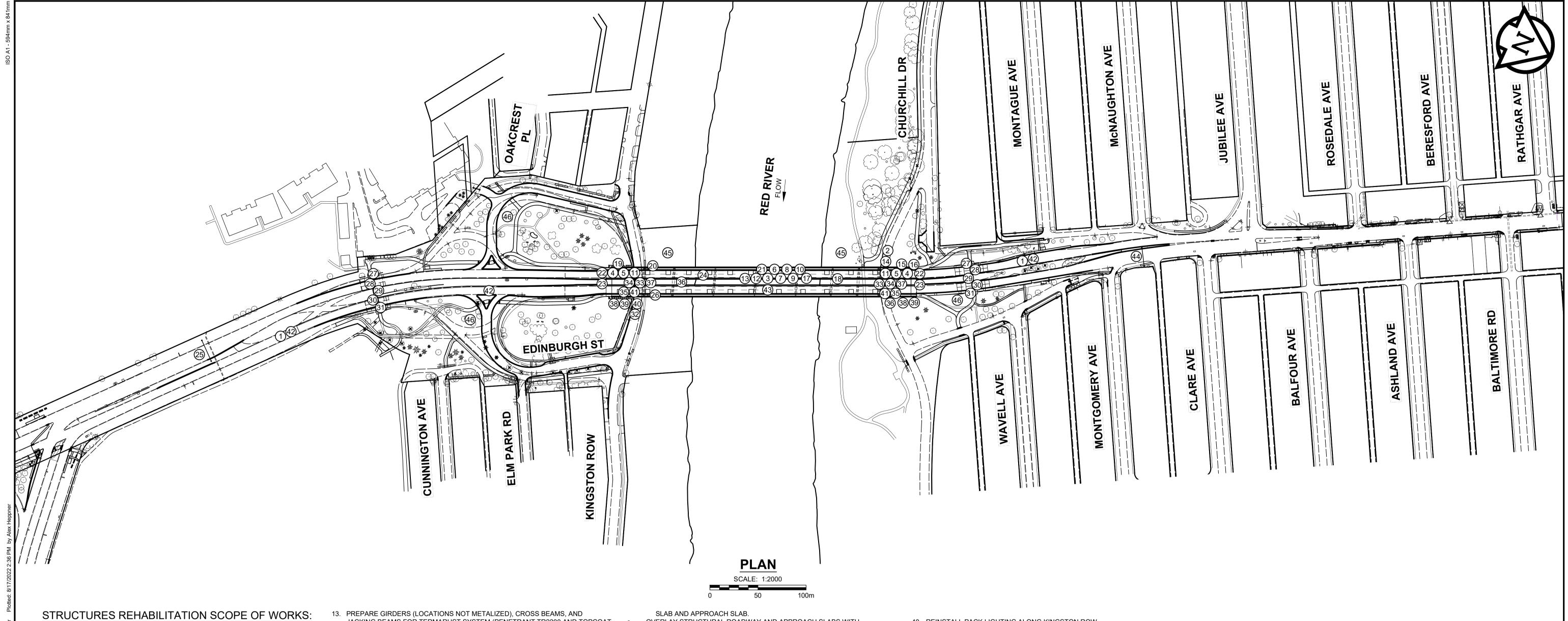
ISSUED FOR REGULATORY APPROVAL

SHEET OF

1

DRAWING NUMBER

CITY DRAWING NUMBER



INITIAL WORKS - FALL 2022

- CONSTRUCT ROADWAY CROSSOVERS FOR STRUCTURE STAGING

SOUTHBOUND CARRIAGEWAY - SPRING / WINTER 2023

- 1. IMPLEMENT TRAFFIC CONTROL / STAGING TO CLOSE SOUTHBOUND BRIDGE TO TRAFFIC AND MOBILIZE.
- 2. REMOVE PACK LIGHTING ALONG CHURCHILL DRIVE AND REMOUNT ON TEMPORARY SUPPORTS.
- 3. REMOVE EXISTING DECK THIN EPOXY WEARING SURFACE, BRIDGE RAIL, CONCRETE BARRIERS, AND ENTIRE CONCRETE DECK OF SOUTHBOUND
- 4. REMOVE EXISTING SIDEWALK AND BARRIERS ON ABUTMENT TO EXTENTS SHOWN ON DRAWINGS. COMPLETE FULL-DEPTH REMOVALS OF ABUTMENT ROOF SLABS AT CURB LOCATIONS.
- 5. FULLY REMOVE EXPANSION JOINTS AND SEALS INCLUDING FULL EXPANSION JOINT CONCRETE BLOCKOUT ON ABUTMENT.
- 6. INSTALL ADDITIONAL SHEAR STUDS ON GIRDER TOP FLANGES.
- 7. BLAST CLEAN FAYING SURFACES AT GIRDER STRENGTHENING LOCATIONS AND EXPOSED SURFACES OF FIXED BEARING AT PIER 5.
- 8. STRENGTHEN GIRDERS WITH COVER PLATES
- 9. JACK GIRDERS AND PLACE NEW BRIDGE BEARINGS (ALL LOCATIONS EXCEPT FIXED BEARINGS). MODIFY PIER TOP ELEVATION AT BEARING LOCATIONS.
- 10. FORM AND POUR CAST IN PLACE CONCRETE DECK (INCLUDING NEW DECK DRAINS AND UNDER DECK UTILITY HANGER SYSTEM).
- 11. INSTALL MULTI CELL EXPANSION JOINTS AT BRIDGE ENDS.
- 12. PREPARE GIRDERS FOR METALIZING IN ZONES SHOWN ON DRAWINGS AND EXPOSED SURFACES OF FIXED BEARINGS AT PIER 5. METALIZE GIRDERS AND EXPOSED SURFACES OF FIXED BEARINGS AT PIER 5.

- JACKING BEAMS FOR TERMARUST SYSTEM (PENETRANT TR2200 AND TOPCOAT TR2100) THROUGH PRESSURE WASHING. APPLY TERMARUST SYSTEM.
- 14. REINSTALL LIGHTING PACKS ALONG CHURCHILL DRIVE.
- 15. FORM AND POUR NEW MULTI USE PATHWAY AT ABUTMENT.
- 16. FORM AND POUR FULL-DEPTH PATCHES AT CURB BARRIER LOCATIONS ON ABUTMENT ROOF SLABS.
- 17. FORM AND POUR NEW SINGLE SLOPE CONCRETE BARRIERS ON DECK AND
- 18. INSTALL ALUMINUM TOP RAIL AT MEDIAN BARRIER
- 19. PATCH REPAIRS AT SOUTH ABUTMENT PEDESTRIAN ACCESS STAIRS.
- 20. POUR SIDEWALK THICKENING AND CURB AND INSTALL NEW ALUMINUM BICYCLE RAIL AT MULTI USE PATHWAY.
- 21. INSTALL NEW BRIDGE LIGHTING AND NAVIGATION LIGHTING.
- 22. SCARIFY ABUTMENT ROOF WITHIN ROADWAY EXTENTS.
- 23. REPLACE SOUTH APPROACH SLABS. REPAIR NORTH APPROACH SLAB AS
- 24. OVERLAY BRIDGE DECK AND ABUTMENT ROOF WITH WATERPROOFING MEMBRANE, PROTECTION BOARD, AND ASPHALT WEARING SURFACE. OVERLAY APPROACH SLABS WITH ASPHALT.
- 25. REMOVE EXISTING SOUTHBOUND OVERHEAD SIGN STRUCTURE AND CONSTRUCT NEW.
- 26. RELOCATE UTILITIES EMBEDDED IN NORTHBOUND STRUCTURE TO SOUTHBOUND STRUCTURE.

TUNNEL REHABILITATION WORKS - WINTER 2023 / SPRING 2024

27. TO BE COMPLETED IN CONJUNCTION WITH ROADWORKS: a. MILL AND FILL STRUCTURAL CONCRETE ROADWAY SLAB. COMPLETE PATCH REPAIRS OF SURFACE CONCRETE AS REQUIRED. b. INSTALLATION OF EMSEAL JOINT BETWEEN STRUCTURAL ROADWAY

- OVERLAY STRUCTURAL ROADWAY AND APPROACH SLABS WITH WATERPROOFING MEMBRANE, PROTECTION BOARD, AND ASPHALT WEARING SURFACE.
- REPLACE RAILINGS ALONG MULTI-USE PATH. COMPLETE FULL DEPTH REPAIRS ON TRANSVERSE JOINT AT MID-LENGTH
- 28. COMPLETE LOCALIZED PATCH REPAIRS AND CRACK INJECTION TO DETERIORATED CONCRETE IN TUNNELS.
- 29. COMPLETE SURFACE CLEANING OF TILES / EXPOSED CONCRETE TO REMOVE GRAFFITI. REPAIR / REPLACE LOOSE, MISSING AND DAMAGED TILES INCLUDING REPOINTING, AS REQUIRED.
- 30. PRIME AND PAINT ALL SURFACES.
- 31. ELECTRICAL WORKS TO INSTALL HEAT TRACING IN BOTH TUNNELS AT DRAIN LOCATIONS AND UPGRADE LIGHTNING IN SOUTH TUNNEL.

SUBSTRUCTURE WORKS - WINTER 2023

- 32. REMOVE PACK-LIGHTING AND REMOUNT ON TEMPORARY SUPPORTS ALONG KINGSTON ROW.
- 33. REMOVE GRAFFITI ON ABUTMENTS AND PIERS.
- 34. PATCH REPAIR DELAMINATED AND SPALLED CONCRETE AT PIER AND ABUTMENT LOCATIONS (SUBSTRUCTURE CONDITION SURVEY ONGOING -EXTENTS TO BE DETERMINED).
- 35. INJECT CRACKS AT PIER AND ABUTMENT LOCATIONS (SUBSTRUCTURE CONDITION SURVEY ONGOING - EXTENTS TO BE DETERMINED).
- 36. CHLORIDE REMOVAL AND ANODE PLACEMENT (SUBSTRUCTURE CONDITION SURVEY ONGOING - EXTENTS TO BE DETERMINED IF REQUIRED).
- 37. REPLACE EXISTING ACCESS DOORS AND INSTALL MORE SECURE LOCKS TO HINDER VAGRANCY.
- 38. REPAIR THE LIMESTONE FACADES THROUGH SELECTIVE STONE REPLACEMENT AND REPOINTING.

- 40. REINSTALL PACK LIGHTING ALONG KINGSTON ROW.
- 41. REMOVE AND REPLACE SLOPE PAVING AT BOTH ABUTMENTS.

NORTHBOUND CARRIAGEWAY - SPRING / SUMMER 2024

- 42. IMPLEMENT TRAFFIC CONTROL / STAGING TO CLOSE NORTHBOUND BRIDGE TO
- 43. PERFORM ITEMS 2 24 ON THE NORTHBOUND CARRIAGEWAY.
- 44. REMOVE EXISTING NORTHBOUND OVERHEAD SIGN STRUCTURE AND CONSTRUCT NEW.

SITE WORKS - SUMMER 2024

- 45. RESHAPE SLOPES AND INSTALL RIP RAP TO EXTENTS SHOWN ON DRAWINGS.
- 46. COMPLETE LANDSCAPING AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS.



ENGINEERS GEOSCIENTISTS Certificate of Authorization MORRISON HERSHFIELD No. 1736

TENDER No. 615-2022

39. INSTALL ANTI GRAFFITI COATING AT LAND PIERS AND ABUTMENTS.

LOCATION APPROVED UNDERGROUND STRUCTURES SUPR. U/G STRUCTURES DATE COMMITTEE LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF

EXISTENCE AND EXACT LOCATION OF ALL

SERVICES MUST BE OBTAINED FROM THE

WITH CONSTRUCTION.

INDIVIDUAL UTILITIES BEFORE PROCEEDING

Tblt. in S. face of E. Conc. pier in 1st row of Conc. piers PROFESSIONAL'S SEAL N. of S. end of St. Vital Bridge over Red River, ELEV 228.166 m N. of Kingston Row, 5 m W. of E. end of Pier MORRISON HERSHFIELD REGULATORY DESIGNED CHECKED DRAWN APPROVED RELEASED FOR CONSTRUCTION HOR SCALE AS NOTED VERT SCALE A ISSUED FOR REGULATORY APPROVAL | 22/08/17 | BE 03510-SVB DD-Scope of Work-TC.dv AUG 15, 2022 No. REVISIONS YY/MM/DD BY

Winnipeg

ISSUED FOR

APPROVAL

CONSULTANT FILE NAME

THE CITY OF WINNIPEG **PUBLIC WORKS DEPARTMENT**

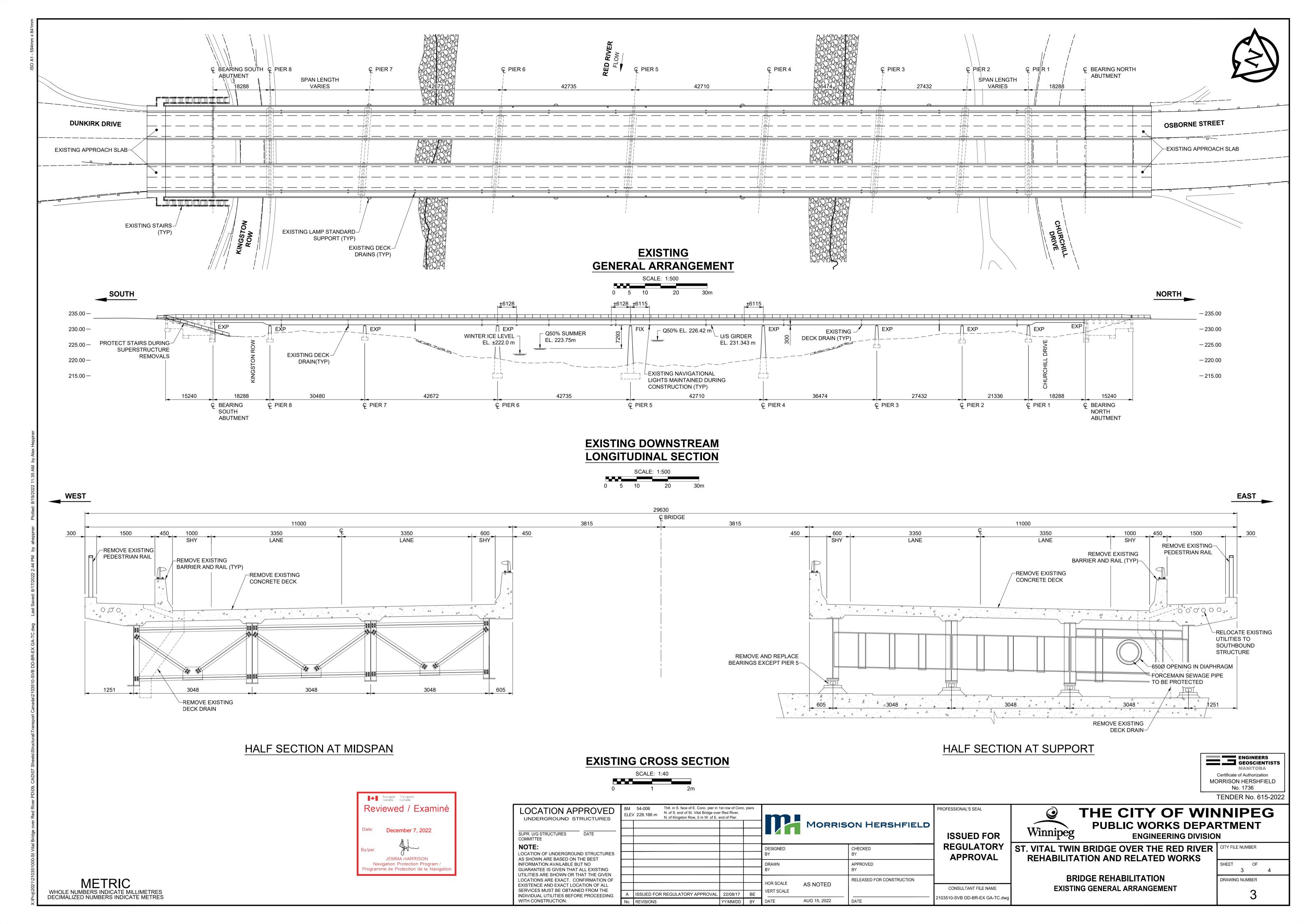
ENGINEERING DIVISION

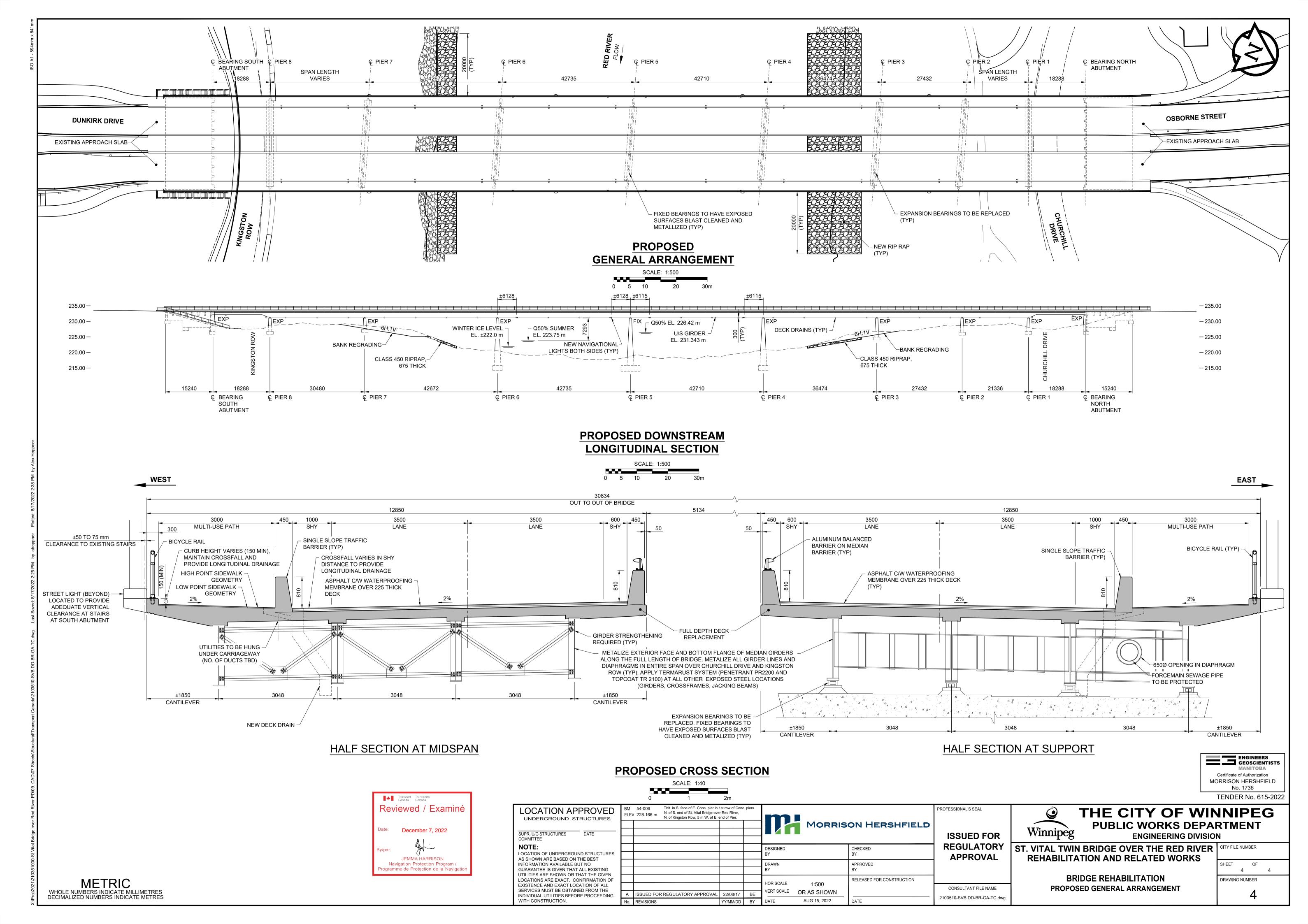
ST. VITAL TWIN BRIDGE OVER THE RED RIVER CITY FILE NUMBER REHABILITATION AND RELATED WORKS

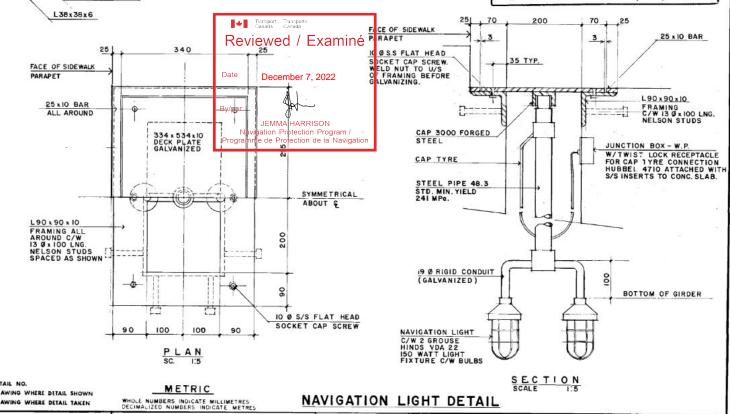
> BRIDGE REHABILITATION **SCOPE OF WORK**

OF 2 DRAWING NUMBER

WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES







ANNEX A

